

Title (en)

Isolators enabling large rotation angle capabilities with highly restricted damper orifices

Title (de)

Isolatoren zur Ermöglichung großer Drehwinkelfähigkeiten mit stark eingeschränkten Dämpferöffnungen

Title (fr)

Isolateurs permettant de grandes capacités d'angle de rotation avec des orifices d'amortissement très limités

Publication

EP 2905504 A3 20151118 (EN)

Application

EP 15152949 A 20150128

Priority

US 201414177916 A 20140211

Abstract (en)

[origin: EP2905504A2] Embodiments of an isolator (10) are provided. In one embodiment, the isolator includes a damper housing (22) having a radially-extending partition wall (38) through which a central opening (30) is formed. First and second hydraulic chambers (56, 58) are located on opposing sides of the radially-extending partition wall and may be filled with a damping fluid. At least one restricted orifice (60) is formed through the damper housing and fluidly couples the first and second hydraulic chambers. The isolator further includes a damper piston (20), which extends through the central opening, which is exposed to the damping fluid when the first and second hydraulic chambers are filled therewith, and which is configured to translate along a working axis (12) with respect to the damper housing during operation of the isolator.

IPC 8 full level

F16F 9/36 (2006.01); **F16F 9/18** (2006.01); **F16F 9/19** (2006.01)

CPC (source: EP US)

F16F 1/028 (2013.01 - EP); **F16F 9/061** (2013.01 - EP); **F16F 9/18** (2013.01 - EP US); **F16F 9/19** (2013.01 - EP US); **F16F 9/3221** (2013.01 - EP);
F16F 9/3235 (2013.01 - EP); **F16F 9/361** (2013.01 - EP US); **F16F 9/54** (2013.01 - EP)

Citation (search report)

- [XA] DE 2935935 B1 19810226 - BOGE GMBH
- [X] FR 2333168 A1 19770624 - WESER AG [DE]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2905504 A2 20150812; EP 2905504 A3 20151118; JP 2015152171 A 20150824; US 2015226282 A1 20150813

DOCDB simple family (application)

EP 15152949 A 20150128; JP 2015016797 A 20150130; US 201414177916 A 20140211